Amendments to the Specification:

Please amend the specification as follows:

Please replace the first paragraph starting at page 15, line 1, with the following rewritten paragraph:

A material suitable for superconducting conductor 22 is an oxide high-temperature superconducting tape, such as a Bi based semiconductor superconductor, covered with a silver sheath. Such tapes are wound in a plurality of layers around the former 21 to form a conductor. It is desirable that the superconducting wires be wound in an even number of layers, and that the winding directions of two adjacent layers be in opposite directions. With such layered structure, the reduction in the leakage of magnetic flux to the outside can be achieved. It is desirable that spiral pitches and winding directions be adjusted so that electric current flows uniformly by making the impedance of the layers of the superconducting wires equal to each other.